Amendments to the Specification

Please replace the last paragraph beginning on page 3 with the following paragraph:

[0006] In the days before credit was readily accessible, some stores carried the sign, "cash and carry," meaning: pay your cash and carry away the merchandise you purchased. That, in its simplest form, is the cash market. The buyer finds the precise commodity that suits him--perhaps an orange that has ripened to the proper degree--pays his money and becomes the owner of the merchandise. Technically, cash market trading usually occurs after a predetermined point in the life of a commodity future, for instance [[,]] forty-eight hours prior to the delivery date. At that point the futures contract leaves the futures market and automatically converts to a cash contract.

Please replace the second paragraph beginning on page 4 with the following paragraph:

[0008] Futures contracts differ from forward contracts in that the owner of a futures ~~contact~~ **contract** may sell any part of the contract prior to the contract being executed. An owner of a forward contract must take possession of the physical commodity without transferring any right or portion of the physical commodity prior to execution of the forward contract. Conversely, the owner of a futures contract may sell the contract prior to the date of execution or even sell options on the contract that may act to leverage the futures contract away from the owner in the future.

Please replace the second paragraph beginning on page 5 with the following paragraph:

[0012] Price is a rationer; if the price is right, the supply of a commodity should balance the demand for it--production should match use. If the price is too high, some who may have planned to use a product may decide to use less [[,]] go without, or

they may select a substitute for example, they may eat chicken instead of beef. If enough users are priced out of the market, the price may turn down which may encourage more use and discourage production. If the price is too low, users will deplete existing supply and a shortage may develop. Subsequently, prices may rise, which will tend to discourage marginal buying. Should the price remain relatively high this would likely promote production or attract additional supply of the good.

Please replace the forth (last) paragraph beginning on page 5 with the following paragraph:

[0014] Price discovery for a particular commodity usually occurs between a buyer and a seller of a particular commodity on the floor of a futures exchange. The floor area of an exchange is divided into pit areas or pits for trading of a particular commodity, e.g. corn, wheat, and cattle. Buyers and sellers of commodities negotiate a price or discover a price in the pit. The trading process is an extremely fast-paced interaction between licensed brokers who use hand signals to communicate a price and acceptance to one another. Once a bid price and **an** ask ~~a~~ price match the contract price is agreed and price discovery occurs. Futures contracts are usually standardized as to quantity, quality, and location so buyers and sellers in the pit only bargain over price. Because of this standardization, commercial interests are better able to compute local cash prices. This contributes to local market efficiency and to consistency among markets. In many commodities, futures prices have earned a role as key reference prices for those who produce, process, and merchandise the commodity. Since cash and futures prices reflect similar price-affecting factors, their price levels tend to rise or fall together.

Please replace the first paragraph (Summary of the Invention) beginning on page 9 with the following paragraph:

[0021] The present invention relates to a futures exchange for services contracts. The SerFEx is an electronic market system that enables the exchange of cash (spot and forward) contracts and futures contracts for the delivery of services. Services are traded on the exchange similar to commodities on a prior art commodities exchange. The exchange allows the futures market to determine the right price for services for the producers and consumers of those ~~service~~ **services**. Participants may buy, sell, or leverage services contracts through a variety of order types. The exchange is composed of electronic infrastructure that has four major components: a front-end facility comprised of authorized intermediaries, an automated bid/ask matching system, a clearinghouse system, and a title management system. The exchange operates twenty-four hours per day and seven days per week with all accounts settled at least once in every twenty-four hours. Participants in the exchange may be producers of services, intermediaries, speculators, and consumers of the services.

Please replace the third (last) paragraph beginning on page 12 with the following paragraph:

[0037] Buyer **122** participates in the exchange by establishing an account with authorized intermediary **110** and arranging to cover the cost of buying any futures contracts being bid on. Normally **[[,]]** buyer **122**, seller **120** and producer **31** telecommunicate their respective bid and ask prices to respective authorized intermediaries **110**, and **112**. Using open outcry order matching system **104**, authorized intermediary **112**, asks a price for commodity futures contracts owned by either seller **120** or producer **31**. In return, authorized intermediary **110** bids on commodity futures contracts based on bidding instructions from buyer **122**. Authorized intermediary **110**

and authorized intermediary **112** must maintain a physical presence in open outcry order matching system **104** within physical commodities futures exchange **102** in order to participate in the open outcry bidding in the pit. Using the prior art order matching system, bids are manually matched on the floor of the exchange and sent on to clearinghouse **106**.

Please replace the first paragraph beginning on page 15 with the following paragraph:

[0042] Excluding services from futures exchange mechanisms has deleterious effects on both the service and the exchange mechanism. Physical commodities exchanges have mandated that all commodities are graded such that the value of futures contracts might be more accurately valued. Many times governments assume this role but specialized commodity services have filled gaps where government agencies are absent**[[~~, fruit~~ . Fruit]]** and vegetable growers associations for instance, set quality standards and regulate the application of those standards to the products. Generally, services have no real grading standard, although certain heavily frequented consumer industries do have the beginnings of such grading systems. Hotels and restaurants are often rated from one to five stars based on service quality.

Please replace the second paragraph beginning on page 15 with the following paragraph:

[0043] Also, the exchange mechanism itself has not evolved past what is necessary for trading a limited number of types of commodity futures contract. While the electronic transfer of contract parameters between clients and authorized intermediaries is the norm, physical commodity exchanges have been slow to follow.

Generally, prior art physical commodities futures exchange utilize an open outcry order matching system for matching bid and ask prices. Even today this is possible because the number of permutations for commodity type, delivery date, grade, and delivery point is very manageable in an open outcry pit. Many commodities are graded based on historically adopted standards, and delivery points and ties are dictated by growing regions and seasons. Many services, on the other hand, are quite ubiquitous. Hotel room futures contracts, for instance, might be delivered (or more properly performed) at virtually any city and on any day. Other services, such as scheduled airline flights between fixed locations might have more limited delivery points, but performance occurs more frequently than daily. Still others, such as [[~~,~~]] a trucking company, may have fixed delivery points and dates but may be more flexible as to the type of contract. There, a carrier may offer a blanket or open contract between certain dates from one of its terminals. The contract type might be not specified by either the buyer or the service provider of the future until the contract enters the cash market. Then, the ultimate consumer of the service buys the service contract and specifies the type. Finally, a services exchange allows a buyer to initiate a services futures contract order in the expectation that a service provider will register title with the services exchange for a similar service. This situation is more like the prior art reverse commodities auction where bidders initiate the process with a bid and physical commodities producers fill the bid, however, in this case, rather than a commodity or a forward contract, bidding would take place for a services futures contract.

Please replace the third paragraph beginning on page 23 with the following paragraph:

[0067] In accordance with a preferred embodiment of the present invention a broker/dealer authorized intermediary, such as authorized intermediary **510** or authorized intermediary **512** may be any authorized intermediary designated by a buyer

or seller respectively and licensed by the SerFEx. Authorized intermediaries of different variants fall within the scope of the present invention. For example, ~~and~~ an authorized intermediary may be a 'commodity pool broker' that normally conducts institutional transactions for large traders such as insurance corporations and pensions funds. A second type of authorized intermediary is an 'introductory broker' that ~~receive~~ receives a fee for introducing a buyer and seller. It is expected that an introductory broker would not participate in the negotiation process for buying and selling to the extent of a typical authorized intermediary as the introductory broker merely 'introduces' buyers and sellers having parallel, although not quite matching, order requirements. Another type of authorized intermediary is a floor broker, which is licensed by the SerFEx but generally trades for himself. Other types of authorized intermediaries will become apparent to those of ordinary skill in the art during the discussion of the invention.

Please replace the first paragraph beginning on page 24 with the following paragraph:

[0069] Buyer **522** participates in the exchange by establishing an account with authorized intermediary **510** and arranging to cover the cost of buying any futures contracts being bid on. Here, not only does buyer **522**, seller **520** and service provider **530** telecommunicate their respective bid and ask prices to respective authorized intermediaries, but authorized intermediary ~~**500**~~ **510** and authorized intermediary **512** exchange bids electronically also, rather than using an open outcry order matching system.

Please replace the forth (last) paragraph beginning on page 25 with the following paragraph:

[0075] TMS **508** contains the hardware and software necessary to maintain the uninterrupted owner of record title information for every service contract. If a contract is removed from the exchange by issuing a certificate of title, TMS **508** retains a record of title until some date after delivery of service that the exchange rules or government regulations require. While it is possible for buyer **522** to take possession of a certificate of title from TMS **508** during futures trading, generally title is not transferred to seller **~~522~~** **520** in the futures market, but is transferred later, in the cash market. All contracts entering and leaving the exchange have TMS records. If a contract re-enters the exchange before the delivery of service, TMS **508** includes a mechanism for processing the incoming certificate. Recordation and title to virtually all contracts are maintained as electronic media throughout their lifetime on the exchange. As discussed above, the cash market differs from the futures market in that a services futures contract bought in the cash market is immediately reconciled by CH **506** rather than at mark to market. Subsequent title recordation by TMS **508** is immediately performed and recordation of title is immediately transmitted back to CH **506** thereafter.

Please replace the first paragraph beginning on page 27 with the following paragraph:

[0078] **Figure 6** is a flowchart depicting a method for processing services contract futures in accordance with a preferred embodiment of the present invention. The process is initiated by the receipt of an order from an authorized intermediary (step **602**). Prior to executing the order, certain parameters must be understood, such as, the terms of the service contract, price **[[,]]** the customer's identity, and the order type (order types include, but are not limited to, market, limit, contingent, contingency, stop,

market-if-touched (MIT), alternative, and scale) (step **604**). Next, the order database is searched for a match based on the contract type, price, and the type of order (step **606**). A check is made as to whether any contracts in the database match the present order (step **608**). If no matches are present a decision as to whether or not to continue the order is made (step **610**). If the decision is made to discontinue the order, the process immediately ends. On the other hand, if a decision is made to continue the order, the process again flows to step **606** where the database is again searched. The process continues to loop around until a match is detected within the database at step **608**.

Please replace the first paragraph beginning on page 29 with the following paragraph:

[0083] **Figure 7** is a flowchart depicting a method for buying a service futures ~~contracts~~ contract in the SerFEx in accordance with a preferred embodiment of the present invention. The flowchart depicted in **Figure 7** is taken from the perspective of a prospective buyer. The process begins with the prospective buyer identifying the needed service, performance date and time, delivery point, and the optimum price to bid on the service (step **702**). Funds are then transferred to the potential buyer's authorized intermediary to cover the trade (step **704**). It is, of course, envisioned that the buyer and the buyer's authorized intermediary have an ongoing relationship allowing the buyer to make the trade on credit, margin, or settle the account at some predetermined point in the future. Next, a buyer's order for a service futures contract is placed with the buyer's authorized intermediary (step **706**).

Please replace the second paragraph beginning on page 29 with the following paragraph:

[0084] A check is made as to whether any contracts in the database match the buy order (step **708**). If no matches are present, a decision as to whether or not to continue the order at the present price is made (step **710**). If a decision is made to adjust the price, the order with the new price is submitted to the authorized intermediary and the process reverts to step **706** where the database is again checked. The process iterates between steps **706** - **710** ~~either~~ until either the order is matched or a decision is made to adjust the bid price, unless it is decided not to adjust the price at step **710**. If, at step **710**, a decision is made to not adjust the bid price, a determination is made whether or not to adjust the order (step **712**). The prospective buyer might change any of the contract parameters in order to increase the chances of a match. For instance, change the quantity, quality, date, and time, or delivery point to better position the order for a match. The new order is then resubmitted to the authorized intermediary (step **706**) where the database is again checked. Once again the process iterates between steps **706** - **710** for adjusting the bid price and now also iterates between **706** and **712** for adjusting the order. Assuming a decision is made not to either adjust the bid price or the order, a determination whether or not to continue the order is made (step **714)**. If a decision is made to continue the order, the process returns to step **708** and the database is again checked for a price match. The process then iterates between steps **706** - **710** for adjusting the bid price, or between steps **706 - 712** for adjusting the order, or between steps **708** - **714** for continuing the order. If, at step **714**, it is decided to discontinue the order the process ends.

Please replace the first paragraph beginning on page 30 with the following paragraph:

[0085] Returning to step **708**, if and when a match between the bid price and the ask price occurs, a determination is made as to which market controls (step **716**). Normally **[[,]]** the buyer does not participate in the determination for processing the buy order as either a futures contract or a cash contract, however **[[,]]** the buyer should be aware that confirmation from the authorized intermediary depends on whether the buy order is processed in the cash or futures market. If the order is to be processed in a futures market, a recursive determination is made as to whether it is the mark to market time (step **718**). If not **[[,]]** the process recursively returns to step **718** until mark to market time. At that time the contract is settled in the clearinghouse by transferring funds from the buyer's account to the seller's account. The buyer is then notified by the buyer's authorized intermediary of the settlement and the transfer of funds (step **720**).

Please replace the second paragraph beginning on page 30 with the following paragraph:

[0086] Returning to step **716**, if a determination is made that the proper market for completing the trade is a cash market, the order is cleared immediately. The contract is then immediately settled ~~by~~ in the clearinghouse and funds are transferred to cover the cost of the sale. The buyer is then notified by the buyer's authorized intermediary about the settlement and the transfer of funds for the sale occurs (step **720**).

Please replace the second paragraph beginning on page 31 with the following paragraph:

[0089] Next, a check is made as to whether any bids in the database match the ask price of the sell order (step **808**). If no matches are present **[[,]]** a decision as to whether or not to continue the order at the present price is made (step **810**). If a decision is made to adjust the price, then an order with ~~an ask new~~ **a new ask** price is submitted to the authorized intermediary and the process reverts to step **806**. The process iterates between steps **806 - 810** either until the order is matched or a decision is made to again adjust the ask price, unless it is decided not to adjust the ask price at step **810**. If, at step **810**, a decision is made not adjust the ask price, a determination is made whether or not to continue the order (step **812**). If a decision is made to continue the order, the process returns to step **808** and the database is again checked for a match between the current ask price and bid prices in the database. The process then iterates between steps **806** - **810** for adjusting the bid price, or between steps **808 - 812** for continuing the order. If, at step **812**, it is decided to discontinue the order the process ends.

Please replace the second paragraph beginning on page 32 with the following paragraph:

[0092] Finally, the buyer of the service may, at any time after the sale, request that the TMS deliver a certificate of title. Whether or not the buyer requests a certificate does not matter to a typical seller who is not also the service provider. However, if the seller is also the service provider then the seller/service provider must have a mechanism to identify the rightful owner of the service contract. A service provider will provide a service to the bearer of a certificate of title, if issued, or to a claimant who is of

record of last title with the TMS. Therefore, a determination must be made by the seller whether the buyer has requested the certificate from the TMS (step **820**). If the buyer requests a certificate of title the service provider receives a confirmation from the TMS that a certificate was issued and possibly the identity of the ~~issue~~ **issuer** (step **822**). The service provider must then perform the service at the specified date, time, and delivery point for any valid holder of the certificate of title (step **824**). Alternatively, if at step **820** a certificate is not issued, the service provider receives the identity of the last titleholder from the service contract record from the TMS (step **826**). In that case, the service provider is obliged to perform the service at the specified date, time, and delivery point for only a properly identifiable last title holder (step **828**). The process then ends.

Please replace the third (last) paragraph beginning on page 32 with the following paragraph:

[0093] **Figures 9A** and **9B** are flowcharts depicting a process for selling royalty escrow services contract futures in the SerFEx in accordance with a preferred embodiment of the present invention. The flowcharts depicted in **Figure 9A** and **9B** are taken from the perspective of a service provider but are similar in most respects to that of a prospective seller. Additionally, steps **902** - **928** are identical to steps **802**- **828** discussed with respect to **Figure 8** above, with minor exceptions, and therefore only the ~~difference~~ **differences** will be addressed below.

Please replace the third (last) paragraph beginning on page 34 with the following paragraph:

[0099] Processing orders for service futures contracts is normally performed every twenty-four hours, at the mark to market time. At that time all outstanding contracts are settled and the futures market is cleared. Commodities contracts are usually transferred to the cash market the beginning of the trading day prior to the deliver date. In so doing **[[,]]** each commodity is trading in the cash market for approximately the same duration. Throughout the description of the present invention, the SerFEx must determine whether a services contract order is to be processed in the futures market or in the cash market. Unlike physical commodities futures, which usually ripen on a monthly basis, services contract may ripen at any time of the day or night. Ideally, switching a services contract from the futures market to the cash market should occur at the same relative time for each service with respect to that services performance time. Therefore, rather than switching all ripe service contracts at the same time, without regard to the time of performance, every service contract will be switched N hours from its time to perform, or at its ripe time. Ripe service contracts are traded in the cash market. Thus, services contracts will move from the futures market to the cash market all hours of the day and night (remembering that trading takes place twenty-four hours a day and seven days a week in the SerFEx). By switching service contract from one market to the other every N hours, each service contract spends approximately the same number of hours being traded in the cash market.

Please replace the second (last) paragraph beginning on page 35 with the following paragraph:

[00101] A conjunctive order combines two or more dissimilar service contracts to form a needed service. Ideally, conjunctive orders do not sacrifice grade, quantity, performance date, or delivery point in order to acquire the necessary service. Individually **[[,]]** the service contracts that comprise a conjunctive order is of no real value to the buyer unless the buyer can secure each service contract, that as a whole, provide the buyer with the desired service. Therefore, an important tactic for acquiring each of the separate services in the conjunctive order is to make each service order contingent on acquiring the other services that comprise the conjunctive order. A contingent order ensures that the buyer will not succeed in buying only unusable services.

Please replace the first paragraph beginning on page 36 with the following paragraph:

[00102] **Figure 10** is a flowchart depicting a process implementing a conjunctive service contract order strategy. Initially, it is assumed that a potential buyer has outstanding bids on a service contract that is not matched and the buyers must find an alternative to the contract (step **1002**). The buyer must then determine if a conjunctive service contract order strategy is possible for the necessary service (step **1004**). Certain services lend themselves to a conjunctive bidding strategy and others do not. Examples of those that do not include health care, social assistance, arts, entertainment, recreation, accommodation, and food service. Some services that easily adapt to a conjunctive bidding strategy are transportation, warehousing, postal services, financial and insurance; professional, scientific, and technical services. However, even if the service is particularly suited to conjunctive bidding **[[,]]** the individual services

necessary to complete the conjunctive order might not be present in the market. If a conjunctive order in not possible, the buyer is left with the decision of whether or not to change the bid price (step **1006**). Should the potential buyer not change the bid price the process ends, alternatively the potential buyer may reset the bid price with the authorized intermediary (step **1008**). The process then ends.

Please replace the second paragraph beginning on page 36 with the following paragraph:

[00103] Returning ~~the~~ **to** step **1004**, if a conjunctive order is possible **[[,]]** the potential buyer must then identify the best possible combinations of service orders that equate the present service contract order (step **1010**). From the possible conjunctive combinations the potential buyer then places a contingency order for the conjunctive service contracts (step **1012**). Clearly **[[,]]** the potential buyer would be worse off if some but not all of the individual orders were ~~match~~ **matched** and bought while others were not. Therefore, the potential buyer should make every order in the conjunctive combination contingent on every other order in the combination.

Please replace the third (last) paragraph beginning on page 36 with the following paragraph:

[00104] It should be recognized that the conjunctive bidding strategy may be an alternative to successfully bidding on a service contract in the market. More than one possible conjunctive combination of service contracts may exist in the market that could supplement the primary conjunctive order (step **1014**). If these services are in the market, the buyer may choose to bid on other conjunctive combination of services (step

1012). Importantly, a second conjunctive bid is seen as an alternative strategy to the primary conjunctive bid, so these bids should be contingent on each other's success as well as contingent on the failure of the primary conjunctive order. Acquiring two conjunctive service contract combinations is almost as bad as only acquiring some but not all of the individual orders in the conjunctive order. Other possible conjunctive orders may be identified and orders placed with the authorized intermediary to cover those combinations (steps ~~1014 to 1012~~ **1012 to 1014**). At some point **[[,]]** either no other conjunctive combination exists or the potential buyer decides not to place the order, the process then ends.

Please replace the second (last) paragraph beginning on page 38 with the following paragraph:

[00109] If the TMS has not provided the service provider with the identity of the last titleholder of record, then it is assumed that a certificate of title has been issued by the TMS. In practice **[[,]]** the TMS may notify the service provider of the issuance of a certificate of title and/or the identity of the last titleholder. In that case, the bearer of the certificate of title would be the legitimate owner of the service. There may also be situations, although rare, where a certificate of title was issued after the identity of the last titleholder was transmitted to the service provider. In any case, it should be appreciated that the bearer of the certificate of title is the proper owner of the service contract. Of course, in this example, the service provider may perform for the last titleholder of record only when presented with a demand for service from a claimant bearing certificate of title.

Please replace the first paragraph beginning on page 39 with the following paragraph:

[00110] Returning ~~the~~ to step **1204**, if the identity of the last titleholder has not been transmitted [[,]] the demander is requested to present a certificate of title in order to demonstrate ownership of the service (step **1212**). If the demander cannot produce the certificate, then the service provider must refuse service in lieu of providing the service for the proper demander (step **1208**). Returning again the step **1212**, if the demander does bear the certificate it must be authenticated (step **1214**). Normally, authentication would require the bearer to show that the TMS issued a certificate to the bearer, or possibly prove a chain of ownership to the original recipient of the certificate from the TMS. It is understood that SerFEx rules ultimately define the steps necessary for a demander to authenticate a certificate of title. If the demander cannot authenticate the certificate to the satisfaction of the SerFEx, then the service provider must refuse service in lieu of providing the service for the proper demander (step **1208**). If the demander presents an authentic certificate of title to the service provider, then the service provider is obliged **to** perform the contract service for the demander (step **1210**). The process then ends.

Please replace the second (last) paragraph beginning on page 39 with the following paragraph:

[00111] As can be seen from the forgoing, the SerFEx is an electronic market system that enables the exchange of cash (spot and forward) contracts and futures contracts for the delivery of services. The exchange allows the futures market to determine the right price for services for the producers and consumers of those ~~service~~ **services,** which is heretofore unknown in the art. Participants may buy, sell, or leverage services contracts through a variety of order types. Participants in the

exchange may be producers of services, intermediaries, speculators, and consumers of the services. The exchange is a significant advancement over prior art exchanges by allowing the futures market to determine the right price for services for the producers and consumers of those services. The exchange is composed of a novel electronic infrastructure that has four major components: a front-end facility comprised of authorized intermediaries, an automated bid/ask matching system, a clearinghouse system, and a title management system. This infrastructure completely eliminates the needed for open outcry price matching. Because the exchange is not based on the open outcry method of price matching, the exchange operates twenty-four hours per day and seven days per week. As with a prior art exchange, all futures accounts **are** settled at least once in every twenty-four hours and the market is cleared. However, the owner of a service contract can take possession of a transferable title that can be redeemed for service contract performance with the service provider.